DOCUMENT RESUME

ED 308 466 CS 009 679

AUTHOR Popwell, Emma Pace
TITLE The Effects of Classroom Placement on the Reading Achievement of Preschool Nonattenders in Kindergarten and First Grade.
PUB DATE Apr 88
NOTE 37p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 5-9, 1988).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Research; Grade 1; Grouping (Instructional Purposes); Kindergarten; Prereading Experience; Primary Education; Principals; *Reading Achievement; Reading Readiness; School Readiness; School Surveys; *Student Placement
IDENTIFIERS California Achievement Tests; Developmental Indicators Assessment Learning

ABSTRACT

A study examined the kindergarten placement decisions of elementary school principals and the extent to which the grouping patterns persisted into the first grade. Subjects, 555 nonpreschool attenders who were enrolled in kindergarten at 22 elementary schools, were randomly selected from each strata of low, medium, and high student eligibility for the subsidized school lunch program. The children were tested for reading readiness, mastery of basal reading skills, and reading achievement on a standardized norm-referenced test. The principals of the schools were interviewed concerning the methods used to assign new kindergarten students to classrooms. Results indicated that the criteria for initial assignment of new kindergarten pupils to classrooms were more related to organizational or managerial functions of resource allocation rather than to a systematic use of data to accommodate the broad range of pupils' out-of-school learning experiences. Results also indicated that the factors which contributed to the variability in reading achievement in kindergarten were, in order of importance: (1) successful completion of the prereading program; (2) initial readiness to begin the formal prereading program; (3) classroom composition in which the preschool nonattenders comprised the minority or equal proportion; and (4) the socio-economic status of the school. (Eight tables of data are included; the principal survey is attached.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED308466

The Effects of Classroom Placement on the Reading Achievement of Preschool Nonattenders in Kindergarten and First Grade

Emma Pace Popwell

Research Assistant

Division of Curriculum and Research Services
Department of Research and Evaluation
Atlanta Public Schools
Atlanta, Georgia 30335

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Emma Pace Powell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana, April 5-9, 1988.

CS009679

BEST COPY AVAILABLE

THE EFFECTS OF CLASSROOM PLACEMENT ON THE READING ACHIEVEMENT OF PRESCHOOL NONATTENDERS IN KINDERGARTEN AND FIRST GRADE

SUMMARY

The study examined the placement decisions of elementary school principals to determine reasons and decision criteria used to assign kindergarten students to classrooms, and investigated the extent to which the grouping patterns persisted into first grade for kindergarten students who remained at the same school for first grade. The study measured the effects that different types of classroom grouping patterns had on student outcomes related to reading achievement in kindergarten and first grade. The study focused on the consequences of the placement decisions for the preschool nonattenders in three distinct classroom compositions: classrooms in which the preschool nonattenders comprised all or the majority, none or the minority, and classrooms with an equal proportion of students with preschool experience and students with no significant preschool experience prior to entering kindergarten. The objective of the study was to test the hypotheses that placement decisions which resulted in classroom groupings by preschool experience had a measurable effect on reading achievement in kindergarten, and the grouping patterns and achievement effects established in kindergarten persisted into first grade for students who remained at the same school. The sample was 555 preschool nonattenders who were enrolled in kindergarten at 22 elementary schools. The schools were randomly selected from each strata of low, medium, and high student eligibility for the subsidized school lunch program. The measures used in the study were reading readiness (pretest score), mastery of reading basal skills (posttest score), and reading achievement on a standardized norm-referenced test. An interview schedule was used to determine the methods that principals used to assign new kindergarten students to classrooms, and the types of classroom compositions that resulted from the placement decisions.

The findings regarding placement decisions showed that the decision criteria for the initial assignment of new kindergarten pupils to classrooms were more related to organizational or managerial functions of resource allocation, rather than a systematic use of data to accommodate the differences, similarities, needs, abilities, and broad range of out-of-school learning experiences that new pupils brought to school. Generally, the composition of kindergarten classrooms resulted from the

random assignment of new pupils in accordance with the state and local system policy for maximum class size. The request of parents for a particular classroom placement was considered on an individual basis. Schools also indicated an effort to "equalize" the classroom composition by considering the number of kindergarten retainees as well as "equally dividing" new kindergarten pupils on the basis of previous day care or preschool experience. There were six schools in which the preschool nonattenders comprised the majority in each of the 17 classrooms; five schools in which the preschool nonattenders comprised about an equal proportion of students in each of the 18 classrooms; and the largest group of 11 schools were those in which the preschool nonattenders comprised the minority in each of the 43 classrooms. The findings regarding reading achievement showed that the factors that contributed to the variability in reading achievement on standardized norm-referenced test in kindergarten for preschool nonattenders were, in order of importance, the following: (1) successful completion of the formal prereading program (posttest score), (2) initial readiness to begin the formal prereading program (pretest score), (3) classroom composition in which the preschool nonattenders comprised the minority or equal proportion, and (4) socio-economic status of the school. The variable among the selected four independent variables that contributed to the variability in reading basal progress in first grade was classroom composition in which the preschool nonattenders comprised the minority or equal proportion of students in the group.

The Effects of Classroom Placement on the Reading Achievement of Preschool Nonattenders in Kindergarten and First Grade.

INTRODUCTION

The recent strong interest in testing as a part of the accountability movement has stimulated local school systems to collect data and information for decision making regarding some of the issues facing public education.

The local school system has operated a full-day kindergarten program since 1980-81. A local system pupil progression policy for kindergarten was implemented in 1986-87 and a state-mandated first grade readiness testing program was approved for implementation in 1988-89.

Previous data collection regarding kindergarten pupils revealed the great variety in the types of child care provided to children prior to entering school, great variability in the methods of child care delivery, and diverse patterns of usage by parents.

Since the implementation of the full-day kindergarten program in the local system in 1980-81, the trend of enrollment revealed that 17 percent of the pupils received day care experience from the local system day care program, 40 percent were from community-based child care programs, and 43 percent of the pupils reportedly entered kindergarten with no significant formal preschool experience. From an average class size of slightly over 5,000 pupils, approximately 2,150 children entered kindergarten each year with no formal preschool experience from 1980 to 1986. For the class of 1986-87 (the population for this study) approximately 2,419 of 5,495 pupils (44 percent) reported no significant formal preschool experience at kindergarten enrollment.

The local system must serve both the population of pupils who attended formal preschool programs as well as the large group of pupils who did not attend a formal preschool program.

This study is the second-year of a three-year longitudinal examination of some of the critical variables associated with the performance of preschool nonattenders in the kindergarten class of 1986-87. The first year of the study focused on obtaining information about the types of preschool learning environment which parents provided for the child the year preceding kindergarten. The current year focused on the decision criteria of principals in assigning the preschool nonattenders to classrooms and the performance outcomes for pupils. The third year will examine some of the contextual variables of the classroom and teacher practices in providing instruction to the combination of pupils with preschool and no preschool experience.

The three-year longitudinal study will allow for the synthesis of findings for the sample of preschool nonattenders in kindergarten through second grade.

RESEARCH PROBLEM

The local schools' systemwide reading program provided sequential skills reading instruction with the goal of meeting the needs of each pupil, and a commitment to the improvement of pupils' reading performance. The reading basal series consisted of 13 levels, from reading readiness to the sixth reader. The divisions or magazine sections for the kindergarten and first grade levels are reading readiness, first preprimer, second preprimer, third preprimer, primer, and the first reader. Reading ability and achievement were important performance indicators at kindergarten and first grade and assessment data were gathered at several assessment points: prereading readiness at kindergarten entry, continuous assessment of reading minimum skills during kindergarten and first grade, and the

completion of the recommended amount of reading basal materials at four pacing benchmarks; mid-first and end-of-first semester, and mid-second and end-of-second semester. A standardized achievement test was used to measure reading achievement at the end of kindergarten and at the end of first grade.

The local system policies regarding the grouping of kindergarten and primary pupils for instruction stipulated uniformity among schools relative to the length of the school day for instruction, the maximum class size, uninterrupted instructional time, pupil competencies in a sequenced core curriculum, and the local and state-mandated testing programs.

The elementary school principal is generally accountable for what occurs at the school level, and is specifically accountable for the performance of students. Glassman (1984) called this conceptual perspective the principal-student achievement linkage -- a linkage between the school principal and the overall students achievement in a given school. The central components in the role of the school principal as the instructional leader entail evidence associated with overall gains in student achievement and the personal efforts of the principal to facilitate gains in student achievement.

One important condition impacting the classroom experience of pupils is the assignment to classrooms and placement in groups for instruction. Monk (1987) examined the distribution of pupils across teachers and classes and found great variations in the methods used to assign pupils to classrooms and teachers. Not only was the assignment process important but was often problematic with the intervening variables of parent request and the level of teacher involvement.

As principals in the local system do not have screening, assessment or achievement data for use in making placement decisions for initial kindergarten pupils, this study explored the decision criteria in the general social context of the principal's perception of ability, achievement expectations, and the interpretation

of the attributes and characteristics of the pupils from the available data sources (student registration form, health screenings, family data from personal experience with a school-age sibling, and others). Particular emphasis was focused on the extent to which the information regarding preschool experience was utilized in the placement decisions which resulted in a particular type of classroom composition of pupils by preschool experience.

OBJECTIVE

The study examined the placement decisions of elementary school principals to determine the principle reasons and decision criteria used to assign kindergarten pupils to classrooms. For kindergarten pupils who remained at the same school for first grade in 1987-88, the extent to which the grouping patterns persisted into first grade was investigated.

The study measured the effects that different types of classroom grouping patterns had on student outcomes relative to reading achievement in kindergarten and first grade. The study focused on the consequences of the placement decisions for the preschool nonattenders who entered kindergarten in 1986-87, and contrasted the reading achievement of the preschool nonattenders in three distinct classroom compositions: classrooms in which the preschool nonattenders comprised all of the majority, none or the minority, and classrooms with an equal proportion of pupils with preschool experience and pupils with no significant preschool experience prior to entering kindergarten.

The ultimate objective of the study was to test the assumptions that placement decisions which resulted in classroom groups by preschool experience had a measurable effect on reading achievement in kindergarten, and the grouping patterns and achievement effects established in kindergarten persisted into first grade for students who remained at the same school.

The statistical treatment of data was guided by two null hypotheses:

HO_1: There is no significant difference in the reading achievement for the preschool nonattenders among three types of classroom compositions in kindergarten, when analyzed by pretest score on the reading readiness test.

HO_2: There is no significant difference between the reading achievement for the preschool nonattenders and pupils who attended preschool, when analyzed by the pretest score on the reading readiness test for each of the three types of classroom compositions.

METHOD

Subjects

Students officially enrolled in the kindergaten program of the selected schools for school year 1986-87 constituted the population for the study. For school year 1987-88, the sample included a matched group of the 1986-87 kinderdergarten pupils who were promoted to first grade and who remained at the same school.

The elementary schools in the System were rank ordered, using the percentage of pupils receiving free or reduced-priced school lunches. From each strata of low, medium, and high percentage of participation from the school lunch data, a representative proportion of schools was randomly selected. Twenty-three of the 85 elementary schools (27 percent) were included in the study. The projected sample size was approximately 579 pupils. One school was later eliminated from this phase of the study due to problems encountered with the student data file.

The final sample of 555 preschool nonattenders at 22 elementary schools was the focus of the study. However, the performance profile for the pupils who did not attend formal preschool programs was compared to the group of pupils in the 22

elementary schools that attended formal preschool programs and the mean level of performance for system pupils.

From data submitted on the student registration form, kindergarten pupils with preschool experience and pupils with no preschool experience (preschool nonattenders) were identified. Using an official school enrollment roster for the beginning of the 1986-87 school year, the kindergarten classroom compositions were grouped into three categories: classrooms in which the preschool nonattenders comprised all or the majority, classrooms in which the preschool nonattenders comprised none or the minority, the classrooms in which there was an approximate equal proportion of pupils with preschool experience and pupils with no significant preschool experience prior to entering kindergarten. The same method was used to determine the classroom composition for the first grade class of 1987-88.

Data Collection

The primary data sources for pupils' reading achievement in kindergarten and first grade consisted of the preassessment of reading readiness, performance on the reading minimum skills, progression in the reading basals, and reading achievement scores on the systemwide standardized achievement tests. These tests and assessments were administered by the classroom teacher as a part of the ongoing instructional program.

The kindergarten preassessment program was geared toward measuring the functional level of pupils through screenings for vision, hearing, and dental health; assessment of gross motor and fine motor skills and pre-reading readiness.

The two types of measures used in the study were instruments to assess reading readiness, mastery of basal skills, and reading achievement; and a structured interview schedule for use with principals of the 22 schools.

The Developmental Indicators for the Assessment of Learning (DIAL) was a screening instrument designed to assess the four functional areas of gross motor skills, fine motor skills, concepts, and communication. The Ready Steps Language Survey was an individually administered diagnostic test to determine the child's readiness for the Houghton Mifflin's Getting Ready to Read program or other pre-reading program. The instrument consisted of ten subtests -- one for each of the ten skills areas considered prerequisite to pre-reading: auditory discrimination, following oral directions, instructional language, general vocabulary, oral language development, listening comprehension, sequencing, categorizing, using oral context, and letter form discrimination.

Each pupil entering kindergarten was individually screened with the gross motor and fine motor subtests of the DIAL. Each child was subsequently assessed on the Ready Steps Language Survey. If the child had diffculty (nonmastery) for the first three subtests -- auditory discrimination, following oral directions, and instructional language -- the recommended procedure was that the child would receive remediation for these subtest items before proceeding with the assessment of the remaining subtests on the Ready Steps Language Survey. Further diagnosis was done with the concepts and communication subtests of the DIAL. The DIAL and the Ready Steps Language Survey were administered by classroom teachers as initial screenings in the fall of the school year for entering kindergarten pupils.

Beginning with the 1986-87 school year, grade-level progression of kindergarten students was determined by mastery of minimum progression requirements in reading and mathematics. The student was required to demonstrate mastery of 11 mathematics and 10 reading minimum skills as determined by indicators of mastery and teacher evaluation. This was a local system measure of the standard for promotion to first grade.

The standardized achievement test for norm-referenced testing was the California Achievement Tests (1985 edition). The tests were administered to students as a part of the systemwide achievement testing program in the spring of the year. The total prereading and total mathematics normal curve equivalent (NCE) scores were used as measures of achievement. The California Achievement Tests were designed by McGraw-Hill Company to facilitate functional level testing to measure skills which were taught in the grade for which the test level was recommended.

A structured interview scheduled was used with the principals of the 22 schools to obtain information about the data which were used for decision making for new pupils enrolled in kindergarten (Appendix A). Analysis of the interview responses were used to determine the different methods which principals used to assign new kindergarten pupils to classrooms, and the types of classroom compositions which resulted from the placement decisions.

RELATED RESEARCH

The practice of assigning pupils to groups is an organizational and managerial function as well as an approach to managing instruction for the diverse pupil population at a school. Grant and Rothenberg (1986) indicated research which suggested that the stratifying effects of grouping and tracking derive primarily from the every day operation of schools rather than from conscious intent. The students in one first grade classroom were assigned to four, relatively equal-size ability groups during the first week of school. The assignments were based on the teacher's perception of reading aptitude and observation as reading readiness scores were not available (Felmlee and Eder, 1983).

Guthrie's (1979) discussion of the research views on grouping for reading, stated that after the principal divided the children by age into grade levels within a school, the administrator faced the question of how next to divide the children. Often ability grouping was used, but some principals assigned children to classes on an arbitrary basis such as date of birth or alphabetically. Since many schools placed a high priority on the improvement of reading ability, research examined the effects of grouping patterns on reading achievement and other features of classroom grouping related to achievement.

The highlights from research on ability grouping prepared by the Association of Supervision and Curriculum Development (ASCD) Research Information Service (1982) reported that students who were grouped in classes according to academic ability out performed nongrouped students only slightly. Except for high-ability students in honors classes, ability grouping had little significant effect on learning outcomes, student attitudes toward subject matter and school, and self-concept. These findings were reported by Kulik and Kulik (1982) in a meta-analysis of 52 comparative studies on groupings. The effect of grouping on the achievement of

averge and below-average students was near zero. The effect of grouping was clearer on student attitude than on student achievement.

The Houghton Mifflin Education series (Schoephoerster, 1979) discussed grouping as a tool for managing individual differences for reading instruction. Despite the common denominator of age, students differ in many biological and cultural ways which have implications for the organization of instruction. The instructional implications include differences in terms of when each student is ready or can be made ready to learn the reading curriculum, differences in the rate at which the learning can be achieved, and differences in terms of special needs and problems.

The controlling factors for the organization of instruction are readiness, the rate of learning, and the special need of the individual student. The author suggested that the classroom teacher should form nearly homogeneous groups within the larger heterogeneous setting of the classroom. Individualized instruction for teaching each student as an individual does not preclude group instruction. With attention given to individual differences, the group advances only when the slowest student has learned.

Schoephoerster stated that when there is a desire to recognize incidental learning, pre-assessment of skills is done and a skill group is temporarily formed based on those who do not already know the skill. For self-contained classrooms, the manner in which students are assigned to the classroom will be a determinant of how reading groups are formed. Students can be assigned to a self-contained classroom by heterogeneous, homogeneous, or controlled heterogeneous assignment. Randomly assigned students are likely to be very heterogeneous or dissimilar in terms of readiness, rate of learning, and special needs. Students assigned on the basis of their similarity in variables are more homogeneous in nature. Controlled heterogeneous assignments are manipulated so that some

variability in readiness, rate of learning and special needs exist in the classroom, but not to a great extent.

The author concluded that effective grouping can be influenced by the attitudes of both the teaching staff and administrators. If students are considered incapable of mastering certain difficult content, and if it is believed that it is essential to advance all students in the reading curriculum when a majority have achieved success, it is likely that grouping for instruction will be more of a formality than a way of accommodating individual differences.

Problems persist in the methods of assigning students to groups for instruction. The process of student assignment is rarely well defined or consistently carried out. In the absence of school district policies, there are no formal criteria for this process and classroom placement decisions may be the individual decisions of the administrator or teacher (Riccio, 1985). Students are generally placed in grade-level classes by selected criteria which create heterogeneous or homogeneous groups.

FINDINGS

The primary objectives of the study were to test the assumptions that:

1. the placement decisions of the principals resulted in classroom groupings in which the preschool nonattenders comprised the majority, about equal proportion, or the minority of the pupils;
2. the classroom groupings had a significant effect on the reading achievement in kindergarten; and
3. the grouping patterns and achievement effects established in kindergarten continued into first grade for the pupils who remained at the same school for first grade.

An exploratory interview was conducted with principals regarding the data used for decision making for new pupils enrolled in kindergarten (Appendix A). Four questions were asked: (1) what information is collected at the school as a part of the enrollment of pupils in kindergarten for the first time? (2) what information is used at the school to place/assign new kindergarten pupils to classrooms for the first time? (3) what information is used to make changes in the initial placement/assignment of kindergarten pupils to classrooms; and (4) what additional information is needed at the school for classroom placement and other decision making for new pupils enrolled in kindergarten?

More uniformity than variation occurred for the decision-making process among the schools. The information collected at the school as a part of the enrollment of pupils in kindergarten for the first time consisted of a student enrollment or registration form, screening for vision, hearing and dentral health, and speech and language evaluations. Other state and local-mandated data for school enrollment were the birth certificate, immunization certificate, proof of residence, clinic card, and school lunch application. Information from the day care or preschool program regarding child's attendance, progress, and health were obtained by several schools

that developed an information-sharing process with a specific day care or preschool program in the school-community. Schools generally did not receive day care or preschool information through a formal process, although parents occasionally shared with the kindergarten teachers copies of progress reports or samples of child's work from the day care or preschool program.

The decision criteria for the initial assignment of new kindergarten pupils to classrooms were more related to organizational or managerial functions of resource allocation rather than a systematic use of data to accommodate the differences, similarities, needs, abilities, and broad range of out-of-school learning experiences which new pupils brought to school. Some of the lack of a systematic utilization of data was due to the scheduling of the registration process over a period of several months beginning in may of each school year. The school secretary was an integral part of the registration process for new pupils to the school.

Generally, the composition of kindergarten classrooms resulted from the random assignment of new pupils in accordance with the state and local system policy for maximum class size. The request of parents for a particular classroom placement was considered on an individual basis. Schools also indicated an effort to "equalize" the classroom composition by considering the number of kindergarten retainees as well as "equally dividing" new kindergarten pupils on the basis of previous day care or preschool experience.

The information most often used by schools to make changes in the initial classroom composition consisted of "leveling" in accordance with the policy for maximum class size; request of parents; the involvement of teachers in the discussions regarding perceived ability of pupils to progress at a fast, moderate or slow pace; and pupil's ability to adjust in a particular classroom. The discussions of the perceived ability of pupils to progress and/or adjust generally occurred in

concert with the formal readiness screening and assessment (DIAL and Ready Steps Language Survey) which were conducted during the first month or so of school.

The responses to the question of what additional information was needed at the school for classroom placement and decision-making for new kindergarten pupils indicated the need for a more uniform process to obtain and utilize out-of-school data. At Kindergarten Round-up in May which signals the beginning of the formal school registration for new pupils, the schools begin to make plans to accommodate the new group of kindergarten pupils. In addition to concerns about staffing and allocation of classroom space, principals stated that they made an effort to collect the pertinent data needed for decision-making regarding the care and instruction of pupils. Principals described the need for additional information about the new kindergarten pupils in the following areas: (1) a formal progress report from the pupil's day care or preschool program which included readiness screening or assessment results; (2) communication with the day care and preschool programs about the requirements of public kindergarten so that the day care and preschool programs may select screening and assessment tools which would provide information similar to that which the local system collected (e.g. DIAL and Ready Steps Language Survey); (3) information about communicable diseases or long-term health needs and problems (may not be immediately obtained on the clinic card); and (4) more detailed information about the child which needs to be obtained in teacher-parent discussions and conferences. The general sentiment of principals was that kindergarten teachers would benefit from more systematic data about new kindergarten pupils in light of the local pupil progression policy and the state-mandated first grade readiness test.

The random and modified random methods used by schools to assign pupils to classrooms resulted in the placement of the preschool nonattenders in three types of classroom compositions (Table 1).

TABLE 1

DESCRIPTIVE STATISTICS

GROUP A

SCHOOLS IN WHICH PRESCHOOL
NONATTENDERS COMPRISED THE MAJORITY
IN EACH KINDERGARTEN CLASSROOM

ELEMENTARY SCHOOL CODE	NUMBER OF CLASSROOMS	NUMBER OF STUDENTS	PRESCHOOL STATUS		RETAINED IN KINDERGARTEN	
			Preschool	No Pre School	Pre School	No Pre School
14	3	56	27(48%)	29(52%)	2	2
11	2	30	11(37%)	19(73%)	1	5
05	3	66	26(39%)	40(61%)	1	4
04	2	46	17(37%)	29(63%)	--	5
01	4	82	32(39%)	50(61%)	2	3
20	3	69	30(43%)	39(57%)	1	--
Total	17	349	143(41%)	206(59%)	7	19

GROUP B

SCHOOLS IN WHICH PRESCHOOL
NONATTENDERS COMPRISED ABOUT ONE-HALF
IN EACH KINDERGARTEN CLASSROOM

ELEMENTARY SCHOOL CODE	NUMBER OF CLASSROOMS	NUMBER OF STUDENTS	PRESCHOOL STATUS		RETAINED IN KINDERGARTEN	
			Preschool	No Pre School	Pre School	No Pre School
13	3	65	34(52%)	31(48%)	--	3
08	5	110	59(54%)	51(46%)	2	5
02	2	45	23(51%)	22(49%)	--	--
13	4	75	42(56%)	33(44%)	5	6
09	4	87	45(52%)	42(48%)	3	12
Total	18	382	203(53%)	179(47%)	10	26

GROUP C

SCHOOLS IN WHICH PRESCHOOL
NONATTENDERS COMPRISED THE MINORITY
IN EACH KINDERGARTEN CLASSROOM

ELEMENTARY SCHOOL CODE	NUMBER OF CLASSROOMS	NUMBER OF STUDENTS	PRESCHOOL STATUS		RETAINED IN KINDERGARTEN	
			Preschool	No Pre School	Pre School	No Pre School
17	3	62	44(71%)	18(29%)	1	1
12	4	81	63(78%)	18(22%)	2	3
07	3	66	44(67%)	22(33%)	1	--
21	2	33	26(79%)	7(21%)	1	--
16	5	95	65(68%)	30(32%)	3	4
19	4	90	79(88%)	11(12%)	3	1
22	3	54	38(70%)	16(30%)	1	6
18	6	118	73(62%)	45(38%)	1	2
10	6	110	66(60%)	44(40%)	3	7
15	4	88	61(69%)	27(31%)	--	2
06	3	53	38(72%)	15(28%)	--	--
Total	43	850	597(70%)	253(30%)	16	26

TABLE 2

DESCRIPTIVE STATISTICS
MATCHED SAMPLE OF* PROMOTED STUDENTS WHO ATTENDED THE SAME SCHOOL FOR KINDERGARTEN AND FIRST GRADE

VARIABLE	TOTAL	NUMBER BY PRESCHOOL STATUS			
		PRESCHOOL		NO PRESCHOOL	
		Step-2	Step-1	Step-2	Step-1
Kdg Ready Steps Language Survey	988	502	144	184	158
		Mastered	Not Mastered	Mastered	Not Mastered
Kdg Getting Ready To Read	948	607	19	310	12
		Primer	Preprimer	Primer	Preprimer
First Grade Basal Progress	1,036	599	70	313	54

*Promoted included pupils who were administratively placed.

TABLE 2 Continued

VARIABLE	TOTAL	NUMBER BY PRESCHOOL STATUS	
		PRESCHOOL	NO PRESCHOOL
Class Composition			
Minority Preschool Nonattenders	598	434	164
Equal Proportion	250	146	104
Majority Preschool Nonattenders	188	89	99

VARIABLE	TOTAL	NUMBER BY PRESCHOOL STATUS	
		PRESCHOOL	NO PRESCHOOL
Socioeconomic Index			
Low SES School Index	462	272	190
Middle SES School Index	394	264	130
High SES School Index	180	133	47

There were six schools in which the preschool nonattenders comprised the majority in each of the 17 classrooms (Group A). The overall proportion of kindergarten pupils in the six schools was 41 percent preschool to 59 percent no-preschool. There were five schools in which the preschool nonattenders comprised about an equal proportion of students in each of the 18 classrooms (Group B). The overall proportion of kindergarten pupils in the five schools was 53 percent preschool and 47 percent no-preschool.

The largest group of schools were those in which the preschool non-attenders comprised the minority in each of the 43 classrooms (Group C). Two classrooms were combinations or accross-grade groupings of kindergarten and first grade students. All of the kindergarten students in these two classrooms had preschool experience. The overall proportion of kindergarten pupils was 70 percent preschool and 30 percent of students with no preschool experience.

For students who remained in the same school for two consecutive years, 104 were retained in kindergarten. The greater proportion of the group (71, 68%) were students with no preschool experience. Even for the schools in which the preschool nonattenders comprised the minority, a greater proportion of the retainees were students who had no preschool experience.

Multivariate analysis to test the difference in the reading achievement among the three types of classroom compositions for the preschool nonattenders in kindergarten and first grade made use of the following variables.

The independent variables and covariates were:

1. step one (nonmastery) or step two (mastery) on the Ready Steps Language Survey screening;
2. nonmastery or mastery of the Getting Ready to Read prereading program;
3. class composition (minority preschool nonattenders, equal proportion, or majority preschool nonattenders);

4. socioeconomic index for the school (low, middle, or high); and
5. Preschool status (no preschool or preschool).

The dependent variable for reading achievement at kindergarten was the total reading normal curve equivalent (NCE) score on the California Achievement Tests.

The dependent variable for reading performance at first grade was the progress in the reading basal at mid-year of first grade (preprimer and below, or primer and above).

The greatest observable difference in the descriptive statistics in Table 2 was that a larger proportion of the preschool group performed successfully on the Ready Steps skills at the initial kindergarten screening when compared to the no-preschool group. The largest number of students were in schools with a low socioeconomic index and were assigned to classrooms in which the preschool nonattenders comprised the minority proportion of the group.

The multivariate summary analysis are presented in Tables 3 through 8. Results are presented for the preschool nonattenders, the preschool group and the total sample group.

Results for the Preschool Nonattenders

The three relevant variables among the selected four independent variables which contributed to the variability in reading achievement in kindergarten were, stepwise:

1. Completion-with-mastery of the formal prereading program, Getting Ready To Read;
2. Mastery on the Ready Steps Language Survey screening to determine readiness to begin the formal prereading program; and
3. Class composition in which the preschool nonattenders comprised the minority, an equal proportion or majority, respectively.

The one relevant variable among the selected four independent variables which contributed to the variability in reading basal progress in first grade was class composition in which the preschool nonattenders comprised the minority, an equal proportion or majority, respectively.

Results for the Preschool Group

The three relevant variables among the four independent variables which contributed to the variability in reading achievement in kindergarten were, stepwise:

1. Completion-with-mastery of the formal prereading program, Getting Ready To Read;
2. Mastery on the Ready Steps Language Survey screening to determine readiness to begin the formal prereading program; and
3. Class composition in which the preschool nonattenders comprised the minority, an equal proportion or majority, respectively.

The three of the four independent variables which contributed to the variability in reading basal progress in first grade were:

1. Socioeconomic index for the school from high, middle and low, respectively;
2. Mastery on the Ready Steps Language Survey screening to determine readiness to begin the formal prereading program, and
3. Completion-with-mastery of the formal prereading program, Getting Ready To Read.

Results for the Total Sample

The three relevant variables among the selected five independent variables which contributed to the variability in reading achievement in kindergarten were, stepwise:

1. Mastery on the Ready Steps Language Survey screening to determine readiness to begin the formal prereding program,

2. Completion-with-mastery of the formal prereading program, Getting Ready To Read; and
3. Class composition in which the preschool nonattenders comprised the minority, an equal proportion or majority, respectively.

The one relevant variable among the selected five independent variables which contributed to the variability in basal progress in first grade was mastery on the Ready Steps Language Survey screening to determine readiness to begin the formal prereading program.

Summary of Results

The intercorrelation coefficients between the independent variables were small and there were no large changes in R square or the coefficient of determination as each independent variable was added to the equation.

Although no single independent variable indicated substantial importance when used alone in the measure of reading achievement in kindergarten and reading basal progress in first grade, three important independent variables had relative importance when considered together. These were Ready Steps Language Survey screening at kindergarten entry, Getting Ready To Read prereading program at the end of kindergarten, and the composition of the kindergarten classrooms which allowed the preschool nonattenders to receive instruction in classrooms in which they comprised the minority or about equal proportion of the group.

The socioeconomic index for the school had relative importance as an independent variable at first grade, only for the preschool group. The descriptive statistics in Table 2 showed that the greater proportion of the total sample consisted of the preschool group that attended the middle and high SES schools.

In the analysis for the total sample, there was significant intercorrelation between preschool experience and each of the relevant independent variables that contributed to the reading achievement in kindergarten. The significant

correlation of preschool experience with the other independent variables were Ready Steps Language Survey (r = .247; p. = 001); class composition (r = -.200, p. = .000); and Socioeconomic School Index (r = .106, p. = .001). Even though there was a significant correlation between preschool experience and reading achievement in kindergarten (r = .140, p. = .000) the preschool nonattenders who performed well on the Ready Steps Language Survey screening at the beginning of kindergarten also performed well on the standardized reading achievement test (CAT) at the end of kindergarten.

The questions under investigation are: what factors influenced some preschool nonattenders to enter school with a great deal of readiness while others do not? How may the school assist the remainder of the group with readiness development once they enter school, or even before school enrollment?

TABLE 3

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR KINDERGARTEN VARIABLES

PRESCHOOL NONATTENDERS (N = 367)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Getting Ready to Ready	.2166	.0469
2	Ready Steps Language Survey	.2559	.0655
3	Class Composition	.2782	.0774

TABLE 4

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR FIRST GRADE VARIABLES

PRESCHOOL NONATTENDERS (N = 367)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Class Composition	.1156	0134

TABLE 5

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR KINDERGARTEN VARIABLES

PRESCHOOL GROUP (N = 669)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Getting Ready to Read	.1787	.0319
2	Ready Steps Language Survey	.2360	.0557
3	Class Composition	.2762	.0763

TABLE 6

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR FIRST GRADE VARIABLES

PRESCHOOL GROUP (N = 669)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Socioeconomic School Index	.0876	.0077
2	Ready Steps Language Survey	.1162	.0135
3	Getting Ready to Read	.1404	0197

TABLE 7

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR KINDERGARTEN VARIABLES

TOTAL SAMPLE (N = 1,036)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Ready Steps Language Survey	.2607	.0679
2	Getting Ready to Read	.3011	.0907
3	Class Composition	.3317	.1100

TABLE 8

MULTIPLE REGRESSION SUMMARY ANALYSIS
FOR FIRST GRADE VARIABLES

TOTAL SAMPLE (N = 1,036)

STEPWISE	VARIABLE	MULTIPLE R	R SQUARE
1	Ready Steps Language Survey	1264	.0160

DISCUSSION

The philosophy governing the purpose and the organization of the kindergarten often determined grouping. One philosophy holds that the purpose of the kindergarten is that of nurturing the social growth of children, and intellectual growth is subordinate to social growth and development. The philosophy of the State and local school system holds that a curriculum should address the social and intellectual needs of five-year olds. Some kindergarten students are not and cannot be made ready for the curriculum. Others will become ready later in the year and some children come to kindergarten with a great deal of readiness to learn.

The reuslts of the study indicated that the variable which was relevant to reading achievement in kindergarten and reading basal progress in first grade for all groups in the study was the readiness level on the Ready Steps Language Survey. At a lesser level of importance was the preschool composition of the class in which the pupils received instruction. There was also a significant correlation between preschool experience and Ready Steps at the beginning of kindergarten, but not for Getting Ready To Read at the end of kindergarten.

The descriptive statistics indicated that a larger proportion of the preschool nonattenders were retained in kindergarten when compared to their preschool counterparts. Yet, other preschool nonattenders came to school with a great deal of readiness to learn.

The overall objectives of the three-year study of the preschool nonattenders are to identify some of the variables associated with school readiness in the child care arrangements provided for pupils who did not attend a formal group-based day care or preschool program; develop a communication network with parents of preschool nonattenders to influence a child care setting favorable for growth and development; and interprete relevant findings which would help public education plan more effectively to serve both the population of pupils who attended formal

day care and preschool programs, as well as pupils who do not benefit from the formal intervention programs.

The first year of the study focused on obtaining information about the types of preschool learning environment which parents provided for the child the year preceding kindergarten. The current year focused on the decision criteria of principals in assigning the preschool nonattenders to classrooms, and the performance outcomes for the sample pupils who were promoted and retained will be analyzed with other variables at the end of the current school year. The third year will examine some of the contextual variables of the classroom and teacher practices in providing instruction to pupils with preschool and no preschool experience. At the completion of the three years, a synthesis of findings will be made that is anticipated to have a broader application for education policy and practices.

DATA FOR DECISION-MAKING FOR NEW PUPILS ENROLLED IN KINDERGARTEN

Interview with Principal

School _____

Directions:

The information requested is for kindergarten pupils who were enrolled in the school for the first time during school year 1986-87. The information is a part of a study of kindergarten students who had day care or no-day-care experience prior to enrolling in school.

1. What information do you collect at the school as a part of the enrollment of pupils in kindergarten for the first time?

		Yes	No
a. Student enrollment form or registration form		___	___
b. Screening for:	Vision, hearing and dental	___	___
	Speech and Language	___	___
c. Information from the day care or preschool program regarding:			
	Child's attendance	___	___
	Child's progress (assessment or screening)	___	___
	Child's health	___	___
d. Other		___	___

Please describe:

_____

_____

_____

_____

2. What information is used at the school to place/assign new kindergarten pupils to classrooms for the first time (e.g. grade/section 40/01,40/02, etc)?

	Yes	No
a. Social and family data from student enrollment or registration form	___	___
b. Day care or preschool experience from student enrollment form or registration form	___	___
c. Information from the day care or preschool program (attendance, progress, health)	___	___
d. Health and dental screening	___	___
e. Speech and language screening	___	___
f. Request or involvement of teacher(s)	___	___
g. Request of parent(s)	___	___
h. Perception of student's ability to progress at a fast, moderate or slow pace	___	___
i. Policy for maximum class size	___	___
i. Other	___	___

Please describe:

_____

_____

_____

_____

3. What information is used to make changes in the initial placement, assignment of kindergarten pupils to classrooms (e.g. grade/section 40/01to 40/02 etc.)?

	Yes	No
a. Social and family data from student enrollment or registration form	___	___
b. Day care or preschool experience from student enrollment or registration form	___	___
c. Information from the day care or preschool program (attendance, progress, health)	___	___
d. Health and dental screening	___	___
e. Speech and language screening	___	___

	Yes	No
f. Request or involvement of teacher(s)	___	___
g. Request or involvement of parent(s)	___	___
h. Perception of student's ability to progress at a fast, moderate or slow pace	___	___
i. Child's results from the Development Indicators for the Assessment of Learning (DIAL)	___	___
j. Child's results from the Ready Steps Language Survey	___	___
k. Policy for maximum class size	___	___
l. Other	___	___

Please describe:

_____

_____

_____

_____

4. What additional information is needed at the school for classroom placement and other decision-making for new pupils enrolled in kindergarten? Please describe.

_____

_____

_____

_____

Emma Popwell
DCRS/R&E
1987-88

READY STEPS LANGUAGE SURVEY

Hillerich, Robert L. and Johnson, Timothy G. (1986)
Ready Steps Language Survey. Boston: Houghton Mifflin Company.

TEST	SKILL AREAS
1. AUDITORY DISCRIMINATION	. . . hear the differences between beginning sounds (coat or goat?
2. FOLLOWING ORAL DIRECTIONS	. . . perform simple tasks involving one-, two-, and three-step directions?
3. INSTRUCTIONAL LANGUAGE	. . . Understand instructional words commonly used in kindergarten and first-grade reading programs (words such as on, under, above, in)?
4. GENERAL VOCABULARY	. . . Name common objects typically pictured in a pre-reading program?
5. ORAL LANGUAGE DEVELOPMENT	. . . express ideas in sentences that include more than a noun and a verb?
6. LISTENING COMPREHENSION	. . . listen to a selection and recall significant details?
7. SEQUENCING	. . . recognize sequence of events in a pictured story?
8. CATEGORIZING	. . . sort or classify things that are similar in some way?
9. USING ORAL CONTEXT	. . . supply a missing word when oral context is given?
10. LETTER FORM DISCRIMINATION	. . . notice minor differences between letter forms — both lower-case and capitals?

REFERENCES

Anang, Arlene J. (1982). "What Is Reading?: A Social Theory of Comprehension Instruction." Michigan State University. East Lansing Institute on Teaching.

Borg, W. (1964). "Ability Grouping In the Public Schools." Cooperative Research Project 557. Salt Lake City: Utah State University.

Coleman, J.S., et. al. (1966). Equality of Educational Opportunity. Washington, D.C.: United States Government Printing Office.

Felmlee, Diane and Eder, Donna (1983). "Contextual Effects in the Classroom: The Impact of Ability Groups on Student Attention." Sociology of Education, 56:2.

Glassman, Naftaly S. (1984). "Student Achievement and the School Principal." Educational Evaluation and Policy Analysis, 6:2.

Grant, Linda and Rotenberg, James (1986). "The Social Enhancement of Ability Differences: Teacher-Student Interaction in First and Second Grade Reading Groups." The Elementary School Journal, 87:1.

Gutheries, John T. (1979). "Grouping For Reading." The Reading Teacher, 32:4.

Haller, E. J., and Davis, S. A. (1981). "Teachers' Perceptions, Parental Social Status and Grouping for Reading Instruction." Sociology of Education, 54, 162-173.

Kulik, Chen-Lin and Kulik, James A. (1982). "Research Synthesis on Ability Grouping," Educational Leadership, 39:8.

Monk, David H. (1987). "Assigning Elementary Pupils To Their Teachers," The Elementary School Journal, 88:2.

Schoephoerster, Hugh D. (1979). Grouping. A Tool For Managing Individual Differences. Boston: Houghton-Mifflin Company.